Henry George and Jane Jacobs on the Sources of Economic Growth

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ABSTRACT. Henry George and Jane Jacobs shared a remarkably similar vision of the economic functioning of cities and of the sources of the economic growth of cities, despite having differing primary objectives. George wrote *Progress and Poverty* and subsequent works to persuade the public of the equity and efficiency of public capture of economic rents of land and other natural resources and elimination of taxes on labor and capital. Jacobs acquired fame for *The Death and Life of Great American Cities* in which she challenged the prevailing orthodoxy of the urban planning profession. Both saw the density and diversity of economic and cultural activities in cities as a facilitator of innovation and entrepreneurship in all aspects of civilization. Both also recognized the power of the price system in coordinating the activities of independent decision makers and the importance of trade for economic growth.

Introduction

Jane Jacobs did not read Henry George's most famous book, *Progress and Poverty*, but apparently she relied on misleading secondary sources. Had she read Henry George, the intelligent and perceptive Jacobs would not have said:

> Henry George, reasoning from the premise that land is basic capital and basic wealth, asserted that all profits made in cities derive from the value of city land. Of course the peculiarly high value of city land does not derive from anything inherent in the land, but from the concentrations of work upon city land. (Jacobs 1970:119)

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American Journal of Economics and Sociology, Vol. 74, No. 3 (May, 2015).
DOI: 10.1111/ajes.12103

She would have learned that George, after discussing the growth of economic and intellectual power in a city as population grows, observed:

> The most valuable lands on the globe, the lands which yield the highest rent, are not lands of surpassing natural fertility, but lands to which a surpassing utility has been given by the increase of population. (George [1879] 1956:242, BK IV, Ch 2)

She would also have learned that her view of the sources of economic growth had much in common with those of Henry George.

George devoted his career to advancing social justice. In his view this meant leaving in the hands of individuals the fruits of their own labors, while devoting to common purposes the economic rents attributable to land and other natural resources. George is best known for his goal and technique of socializing land rents by imposing a single tax on the value of land. Casual readers of George's best seller, *Progress and Poverty* (1879), as well as anyone relying on the bulk of the secondary literature, might not grasp that the solid economic reasoning on which George built his support for land value taxation relied crucially on an understanding of economic growth that is consistent with that of Jane Jacobs and the modern economists studying technological change. The formal marginal analysis that was emerging as George wrote, and that came to dominate American economics during the following century, left little space for the study of technological change, so many of George's insights on economic growth went uncelebrated by the profession.

Jane Jacobs gained fame for her analysis of cities and how they function. Her first book, *The Death and Life of Great American Cities* (1961), was a best seller that generated enormous controversy in urban planning circles and among others interested in cities. Her battles against the "bulldozer renewal" of Robert Moses and the "city beautiful" school of urban planning attracted much attention. Her stress on the physical structure of cities, on the length of blocks, the width of streets, and the density of population was motivated not just by concerns for livability and safety, but also by an analysis of the economic functioning of cities. Her detailed analysis of how innovation happens and the consequences for cities and nations provides the fine-grained detail that complements George's focus on the macroeconomic results. Both point to the same characteristics of cities in advancing technology.

George and Classical Economics

Henry George devoted long passages ([1879] 1956: BK II, 1898: BK III) to demolishing the Malthusian theory of population. For the casual modern reader, this may seem like a tedious argument between scholars long dead. On closer examination, however, the argument against Malthus (1798), which was so crucial for rescuing from irrelevance George's policy goal of taxing land values, was also the place where he developed his novel and powerful insights on the sources of economic growth. Whitaker (2001) provides a precise description of the classical model and George's contributions to it, so the following paragraphs will focus on those elements that are most relevant to the comparison with the works of Jacobs.

The classical economic theory, which George had taught himself by reading the works of Adam Smith, Ricardo, Malthus, and John Stuart Mill, dominated the profession when George was writing *Progress and Poverty*. One key tenet, famously associated with Adam Smith, holds that the economy is self-regulating; that is, that it performs better if it is left alone than it does when politicians try to guide it:

> Every individual is continually exerting himself to find out the most advantageous employment for whatever capital he can command. It is his own advantage, indeed, and not that of the society, which he has in view. But the study of his own advantage naturally, or rather necessarily leads him to prefer that employment which is most advantageous to the society. (Smith [1776] 1966: BK IV, Ch II, 4)

> All systems either of preference or of restraint, therefore, being thus completely taken away, the obvious and simple system of natural liberty establishes itself of its own accord. Every man, as long as he does not violate the laws of justice, is left perfectly free to pursue his own interest his own way, and to bring both his industry and capital into competition with those of any other man, or order of men. The sovereign is completely discharged from a duty, in the attempting to perform which he must always be exposed to innumerable delusions, and for the proper performance of which no human wisdom or knowledge could ever be sufficient; the duty of superintending the industry of private people, and of directing it towards the employments most suitable to the interest of the society. (Smith [1776] 1966: BK IV, Ch 9, 51)

Smith's sentiments about the efficiency of private markets compared with control by government officials were shared by George and Jacobs.

A second tenet of the classical system was the "law of rent," especially in the form developed by Ricardo ([1817] 1821). Once population has increased to the point where the very best land cannot produce enough to satisfy the demand for food, inferior land must be brought into production. Since wages and returns to capital are determined by the value added by the final units of labor or capital in production, bringing worse land into production lowers wages. The surplus produced on the best land is rent—pure economic rent—which is received by the landlord. It is not a payment for investing in buildings, draining wet fields, irrigating dry ones, managing a farm, or performing labor on the farm. It is the payment that the owner of the land can extract from someone who wants to use the land simply by holding title to the land.

Although Ricardo was not the first economist to discuss rent, his treatment was compact and accessible, and the idea became known as Ricardian rent. This became a staple of classical economic theory and remains a concept in common use among economists, so George's reliance on the concept left him squarely within the economic mainstream. Moreover, even George's analysis of taxing economic rent was in accord with the analysis by Ricardo ([1817] 1821: Ch 10, paragraph 1):

> A tax on rent would affect rent only; it would fall wholly on landlords, and could not be shifted to any class of consumers. The landlord could not raise his rent, because he would leave unaltered the difference between the produce obtained from the least productive land in cultivation, and that obtained from land of every quality. Three sorts of land, No. 1, 2, and 3, are in cultivation, and yield respectively with the same labour, 180, 170, and 160 quarters of wheat; but No. 3 pays no rent, and is therefore untaxed: the rent then of No. 2 cannot be made to exceed the value of ten, nor No. 1, of twenty quarters. Such a tax could not raise the price of raw produce, because as the cultivator of No. 3 pays neither rent nor tax, he would in no way be enabled to raise the price of the commodity produced. A tax on rent would not discourage the cultivation of fresh land, for such land pays no rent, and would be untaxed. If No. 4 were taken into cultivation, and yielded 150 quarters, no tax would be paid for such land; but it would create a rent of ten quarters on No. 3, which would then commence paying the tax.

Although George used Ricardo's analysis of rent, he made a significant change when he turned the focus away from Ricardo's agricultural example toward urban land. Instead of thinking about how many

bushels of grain could be harvested from a particular acre, one would have to know the maximum amount that the landlord could obtain on a long-term lease if he were to auction off the right to build on that property. This is significant because the traditional agricultural examples guided economists into accepting the Malthusian theory of population. For surely if additional people produced less and less per person as population grew, then wages would continually be forced down until they reached the level at which people were unable or unwilling to reproduce. Wages would remain at that subsistence level, and the entire surplus would go to the recipients of the land rents. Under these assumed conditions, it would not matter if the tax on land values took the rent for government, for labor would be reduced to a subsistence level in the long run, anyway. This was the reason George was compelled to devote so much effort to refuting the third major tenet of classical economics, the Malthusian population theory. It was this refutation that inspired some of George's most perceptive and modern analysis.

Classical economists recognized that labor could be applied more intensively to each parcel of land to coax more output from the better parcels as increasing population forced the utilization of inferior land. This process was assumed to be limited by the decreasing marginal productivity of labor. That is, each additional worker employed on a particular parcel would increase output by less than the previous laborer. So, once again, wages would be driven down to the subsistence level as population increased.

George rebelled against this dismal future. In the process of doing so, he turned his focus toward the cities. Like Jacobs, George was a city person, which makes even more ironic the criticism often heard that LVT was a relic of an earlier, more rural America. George celebrated the efficiency of the denser population as cities grow, with the resulting specialization and, more important, agglomeration. The specialization and division of labor that Adam Smith discussed in his famous pin factory example was just one factor making cities efficient. Equally important, according to Smith ([1776] 1966: BK I, Ch III), cities agglomerate different trades, professions, and manufactures in one convenient location so that time is not wasted in being a "jack of all trades" or traveling to obtain the appropriate service or part. George ([1879] 1956: BK IV,

Ch II, ¶15–17) extends these ideas to encompass the efficiency of trade, the professions, and other urban activities:

> The town has grown into a city—a St. Louis, a Chicago or a San Francisco—and still it grows. Production is here carried on upon a great scale, with the best machinery and the most favorable facilities; the division of labor becomes extremely minute, wonderfully multiplying efficiency; exchanges are of such volume and rapidity that they are made with the minimum of friction and loss. Here is the heart, the brain, of the vast social organism that has grown up from the germ of the first settlement; here has developed one of the great ganglions of the human world. Hither run all roads, hither set all currents, through all the vast regions round about. Here, if you have anything to sell, is the market; here, if you have anything to buy, is the largest and the choicest stock. Here intellectual activity is gathered into a focus, and here springs that stimulus which is born of the collision of mind with mind. Here are the great libraries, the storehouses and granaries of knowledge, the learned professors, the famous specialists. Here are museums and art galleries, collections of philosophical apparatus, and all things rare, and valuable, and best of their kind. Here come great actors, and orators, and singers, from all over the world. Here, in short, is a center of human life, in all its varied manifestations.
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> So enormous are the advantages which this land now offers for the application of labor, that instead of one man with a span of horses scratching over acres, you may count in places thousands of workers to the acre, working tier on tier, on floors raised one above the other, five, six, seven and eight stories from the ground, while underneath the surface of the earth engines are throbbing with pulsations that exert the force of thousands of horses.
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> All these advantages attach to the land; it is on this land and no other that they can be utilized, for here is the center of population—the focus of exchanges, the market place and workshop of the highest forms of industry. The productive powers which density of population has attached to this land are equivalent to the multiplication of its original fertility by the hundred fold and the thousand fold. And rent, which measures the difference between this added productiveness and that of the least productive land in use, has increased accordingly.

This simple tale packs in a substantial amount of economic theory. First, it is a recognition that the marginal product of labor is an economy-wide phenomenon. Second, productivity is driven by the vast increase in productiveness of the cities, rather than any decline that

might happen in the rural sector. Third, the division of labor and specialization of Adam Smith's pin factory are only part of the story; the agglomeration of activities resulting from the very density of urban population, the advancement of technology that arises in the urban environment, and the creativity of urban life in all spheres are also important. Consequently, the increasing impoverishment of labor that classical economics attributed to a growing population confronting a decreasing marginal product of labor in agriculture has other causes: the average product of labor grows as population grows, but rent grows faster.

Most important of all, George ([1879] 1956: 508) explained that "mental power is set free for higher uses only by the association of men in communities, which permits the division of labor and all the economies which come from the co-operation of increased numbers." George ([1879] 1956: BK X, Ch III, ¶5-8) assesses the potential for human progress and the risks of retrogression thus:

> Mind is the instrument by which man advances, and by which each advance is secured and made the vantage ground for new advances. Though he may not by taking thought add a cubit to his stature, man may by taking thought extend his knowledge of the universe and his power over it, in what, so far as we can see, is an infinite degree. The narrow span of human life allows the individual to go but a short distance, but though each generation may do but little, yet generations, succeeding to the gain of their predecessors, may gradually elevate the status of mankind, as coral polyps, building one generation upon the work of the other, gradually elevate themselves from the bottom of the sea.
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> Mental power is, therefore, the motor of progress, and men tend to advance in proportion to the mental power expended in progression—the mental power which is devoted to the extension of knowledge, the improvement of methods, and the betterment of social conditions.
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> Now mental power is a fixed quantity—that is to say, there is a limit to the work a man can do with his mind, as there is to the work he can do with his body; therefore, the mental power which can be devoted to progress is only what is left after what is required for non-progressive purposes.
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> These non-progressive purposes in which mental power is consumed may be classified as maintenance and conflict. By maintenance I mean, not only the support of existence, but the keeping up of the social condition and the holding of advances already gained. By conflict I mean

> not merely warfare and preparation for warfare, but all expenditure of mental power in seeking the gratification of desire at the expense of others, and in resistance to such aggression.

In short, George looked out on a world in which increasing population and especially the density of population in cities had been accompanied by a vast improvement in actual average living standards and a still greater improvement in potential living conditions for nearly everyone. Economies of scale as tasks were more finely divided and trade proliferated, economies of agglomeration as complementary activities came into closer association, and, especially, the vast intellectual power of free individuals in voluntary association, had created so much productive power that factories were idle during recessions. George celebrated the marvels of technological progress, including cheap textiles, steam engines for sea and rail transportation, the telegraph, cheap steel and the industries based on it, and advancing electrification, while acknowledging that he could not even imagine how impressive future marvels would be. These advances had still left masses in poverty and had not harnessed the abilities of those consigned by poverty to a life of squalor and degradation. Moreover, a large fraction of the energy of society was wasted on efforts to take wealth from others, rather than to create wealth. (Today, that behavior would be called "rent-seeking.") This, to George, was proof that the problem of poverty is not rooted in population growth or diminishing returns to labor or any other restriction of nature, but rather in the failure of our human institutions to capture the rents of natural resources for people as a whole. This forced government to impose taxes, unjustly and inefficiently, on the creation of wealth, thus doing additional damage.

Jane Jacobs on the City as a Creator of Wealth

Jane Jacobs focused on the fine structure of the urban economy for the purpose of describing how cities become prosperous or decline. While Henry George was clearly referring to the importance of cities in his opposition to the Malthusian negativism and his advocacy of LVT as a cure for economic and social problems, he was not looking inside

particular cities. It should not be expected, therefore, that their analyses were identical, but they were complementary and consistent. Both took an Austrian view of competition, rather than focusing on static equilibria and cost minimization. Both considered specialization and trade as fundamental economic phenomena and found economies of agglomeration to be a significant source of strength in the urban economy.

In *The Death and Life of Great American Cities* (1961), her first and most popular book, Jacobs waxed eloquent about the importance of diversity in urban life. Jacobs (1970) turns the focus specifically on the fabric of city economic life, meaning the myriad of suppliers of products and services woven by markets and individual contacts into a resilient network. The salient feature of this network is that most of the individual firms have multiple suppliers and multiple customers and are independently managed. Thus shocks such as the failure of one firm or the loss of one market are not catastrophic. Each firm facing a shock will hunt for new suppliers or new ways to use its expertise and excess capacity to acquire new customers either inside or outside the city. Thus, the view is more entrepreneurial than the traditional textbook models from introductory economics in which identical small firms produce identical products in reaction to a price that is uniform throughout the market. It is also a highly decentralized model of economic integration with the price system serving to transmit the information that results in the coordination of activities of various firms.

Jacobs has been criticized for unduly stressing "import replacement" as a dynamic force in prospering cities. By this, Jacobs means that firms importing finished goods or services from other places will try to move along the production chain to produce more of the value in the city, moving closer to the import of raw materials, alone, rather than the finished goods. "Import substitution" has long been a traditional slogan for mercantilist economies from the days when Becher (1668) and Hornigk (1684) advised European governments to recent efforts at forced industrialization of less developed economies. Free-market-oriented economists have criticized import substitution, at least since Adam Smith (1776, especially BK IV, Ch VIII) decried policies favoring producers rather than consumers. George (1886: 244) found the underlying source of the public acceptance of protection in "the habit ingrained in thought and speech of looking upon work as a boon."

The point that sets Jacobs's "import replacement" apart from "import substitution" is that Jacobs expected prices to signal to individual entrepreneurs what ventures would be profitable, whereas the mercantilist approach is based on government planners assuming that they have superior wisdom and then using government power (including taxes, subsidies, and regulation) to enforce their decisions. The Jacobs approach is not identical with the recent tendency of governments to say: "We import a lot of steel, so let's get an international donor to build us a steel mill." Rather, it celebrates the entrepreneurs with the imagination to see that they could extend their product lines.

Jacobs (1970: Ch 2) celebrates a parallel process occurring on the export side, with firms within the city economy choosing to take on more functions so that they are no longer selling raw materials or basic services to other firms, but rather moving closer to working up raw materials into finished consumer goods. Just as the mercantilist writers advised governments to forbid imports of finished goods, they also wanted to forbid the export of raw materials in order to capture the jobs and profits from "working them up" into finished goods. This, of course, stifles economically efficient trade as readily as tariffs and similar import restrictions. Jacobs does not fall into this trap, either, because she would not use government control to increase exports, but rather would encourage the natural market-driven processes.

As the city acquires the capacity to perform more and more of the work done on goods and services that were formerly imported in finished form or exported in raw form, the relationship between total economic activity in the city and its exports (the "export multiplier") increases. Jacobs (2001: Ch 3, 1970: Ch 7) does a real service in describing how adding another export to an active city differs from the effects of constructing a largely self-sufficient assembly plant in a rural area. It is the very density of the goods and services that a city can provide that both multiplies the economic benefit of an added export and also provides the congenial environment for entrepreneurial activity. But this is the very agglomeration of activities that Henry George celebrates and is one of his strongest arguments against the Malthusian pessimism about population: increased density of population, in itself, increases output per person. The assumption is that such density and scale effects are sufficient to overwhelm the diminishing marginal productivity of labor

applied to a fixed amount of land, in George's argument. Alternatively, in Jacob's formulation, the productivity of the city environment is sufficient to more than offset the higher costs of space and the inconvenience of congestion in the city.

Jacobs's discussion of the physical planning of cities is a topic that George did not directly consider. Jacobs (1961: Ch 8) argued that for a district of a city to function effectively it must have at least two (preferably more) of the primary functions: residential, commercial, employment, and cultural. Her reasoning has a strong economic component, but is not limited to that. The balance of primary activities in an area spreads the use of common public facilities, such as roads, parks, and parking lots, over a larger number of users as peak loads come at staggered times. That also makes private facilities such as restaurants, bars, and convenience shops more profitable as they spread overhead costs over more hours of the week. The very density of activities in an area means that the customer base remains strong for a greater part of the day. This promotes an increased agglomeration of additional specialized activities in a dense and stable network (Jacobs 2001: Ch 5). The strength of economic activity throughout the day keeps the streets and sidewalks filled at all hours, which makes the area seem safer for pedestrians and residents and lowers the turnover of both residents and businesses (Jacobs 1961: Ch 8). Again, George does not directly deal with such matters except that land value taxation would provide ample revenue for the public facilities and obviate the necessity for the harmful taxes that today hobble economic life.

When George (1879: BK I, Ch III) carries out his attack on the classical wages fund, which modern readers may find tedious, he is actually developing a very modern view of the economy that has much in common with the approach of Jacobs (2001). For George, it was important to establish that wages are not advanced out of capital, but rather are earned from work the laborer is doing. This was a crucial point because if labor must still ask the capitalist to pay wages "until the crops are harvested" or other projects reach fruition, then land value taxation (LVT) alone could not solve the unemployment problem. George's system was carefully constructed and more intricate than many critics have understood. Once LVT is imposed at a rate close to 100 percent, all of the following consequences ensue:

1. The public sector is amply supported.
2. All of the inefficient taxes on labor, capital, and trade can be eliminated to encourage growth.
3. The high tax on rents drives down the initial cost of buying land and other natural resources, so any unemployed person who is willing to pay the annual tax on a site can lease or acquire title to the land for a pittance.
4. Labor working with land begins immediately to produce wealth, even if particular finished goods are not ready for consumption for months or even years (unfinished and intermediate goods are valued by markets and can be sold or serve as collateral for loans).
5. As the land and labor inputs increase, economies of agglomeration, as well as specialization and trade, increase the output per person of the entire economy.
6. Since the economy is a flow process, additional inputs of labor and land result in the immediate flow of output from the system. The markets, if unhindered by central control, take care of the myriad minor adjustments among inputs and outputs. One can think of an oil pipe of great length where a particular barrel may take many hours to pass through, but pumping more in at one end causes an essentially instantaneous increase in output. Moreover, markets are sufficiently efficient to impute value to inputs before the production process is completed.

This focus on flows of services from labor, land, and capital, rather than stocks, helps to explain the cryptic and apparently enigmatic comment (George 1879: BK I, Ch V, ¶ 14):

> As, no matter how much water is poured in, there can never be in a bucket more than a bucketful, so no greater amount of wealth will be used as capital than is required by the machinery of production and exchange that under all the existing conditions—intelligence, habit, security, density of population, etc.—best suit the people. And I am inclined to think that as a general rule this amount will be had—that the social organism secretes, as it were, the necessary amount of

> capital just as the human organism in a healthy condition secretes the requisite fat.

The implication of this remark by George is that within the flow of activities in the economy, even a small adjustment in maintenance, new investment, or replacement will quickly bring about a substantial shift in the amount and uses of capital. Furthermore, such adjustments are not the result of central planning but, rather, a function of the inherent, decentralized, price-driven mechanisms of the economy. The most important point is that in a regime of full rent capture, the price of land would be negligible, so that an able-bodied and intelligent person with no capital could set to work immediately and thus solve the unemployment problem.

In her last major work, Jacobs (2001) adopts a sustained ecological metaphor to complete the economic ideas that she was developing in Jacobs (1961). The resilience of the city economy depends on diversity of economic activities in the city and the tight networks of interconnections. No central coordination is needed because the market provides signals to participants about which behaviors are economically successful and socially useful. A healthy urban economy will continually increase the proportion of transient energy that it reuses. That is, the export multiplier will grow as more and more goods and services are locally produced to replace imports and work up exports to a higher level. Individual buyers and sellers within the city will have myriads of interconnections both within and outside the city, so that shocks to any one segment of the network are absorbed by a multitude of independent minor adjustments, some of which open up possibilities for major new growth and development.

Comparing Views on Trade Theory

Protection or Free Trade (George 1886) is both a powerful statement of mainstream classical trade theory as developed by Smith, Ricardo, J. S. Mill, and others, but also something more. The concluding chapters bring the topic back to George's main goal of land value taxation in a powerful way, as is to be expected. Throughout the book, perhaps surprisingly to George's critics, Austrian and libertarian aspects of George's analysis indicate his sophisticated grasp of economics and the

underlying philosophy, as well as the realities of business. It is these elements that create the compatibility between the works of George and those of Jane Jacobs.

Henry George and Classical Trade Theory

The main elements of the classical trade theory include the point stressed by Adam Smith that the individual, in making decisions in his own interest, is also contributing to the wealth of the nation. Thus, no central controls over exports and imports via tariffs, subsidies, or other tools of government are likely to enhance national wealth any more than simply allowing individuals to make their own choices.

Ricardo added considerable rigor when he developed the theory of comparative advantage. That theory proposes that a nation will benefit from trade even if it can produce everything with less land, labor, and capital than other nations. It will benefit by trading the products in which its superiority is greatest for those in which its superiority is least. The other side of the transaction—the country that is not much good at anything—also benefits by specializing in the product in which its disadvantage is least.

John Stuart Mill added various refinements. George studied these three writers and presented the classical message that trade among nations increases the wealth of all nations. It must not be supposed, however, that George was merely another spokesman for the prevailing wisdom. At the time he wrote, the policy debate focused on "protection" of various domestic industries by high tariffs. An alternate position called for a lower "revenue" tariff to generate funds for the federal government without choking off trade. George does a superb job of refuting all of the common arguments in favor of tariffs of any level.

One of the common arguments for tariffs is that, while trade may be efficient in the sense that the country enjoys a larger quantity of goods with trade than it could without it, some individuals may lose their jobs and hence bear costs. George (1886: Ch XXIII, ¶13) points out that this argument, like most fallacious policy arguments, derives from the habit of treating employment as the goal:

> Those who imagine that they can overcome the popular leaning to protection by pointing out that protective tariffs make necessary more work

> to obtain the same result, ignore the fact that in all civilized countries that have reached a certain stage of development the majority of the people are unable to employ themselves, and, unless they find some one to give them work, are helpless, and, hence, are accustomed to regard work as a thing to be desired in itself, and anything which makes more work as a benefit, not an injury.

Labor expended is properly considered a cost of the goods that are the object of the economy. But overturning the conventional idea that employment is an end in itself raises the question of distribution of the wealth produced by the economy. Using good classical theory, George shows that in his model all of the surplus of the economy, after a period of adjustment, raises the returns to the fixed factor, which means the landlords capture all the gains from trade or other sources of increased production. No wonder popular support for free trade is limited if the mass of people receive none of the benefits! In "The Robber that takes all that is left," George (1886: Ch XXV) argues that it does little good to stop the losses from tariffs, monopolies, inefficient taxes, and wasteful government expenditure if the main result is to increase the wealth of the landlords. Thus, in George's view, the most important reform is to capture natural resource rents for public use. When the elimination of tariffs is combined with the taxation of land values, that is what George (1886: Ch XXVI) called "true free trade." Other reforms will be useful after that is accomplished.

It is noteworthy that George (1886: Ch IV, ¶14–17) arrives at his free trade position both through the fundamentally utilitarian approach of considering efficiency from the national standpoint and from the libertarian position of considering only the freedom of the individual and minimizing the significance of the arbitrary lines called "national borders":

> What theoretical protectionist is there, who, if no one was watching him, would scruple to carry a box of cigars or a dress pattern, or anything else that could be carried, across a steamer wharf or across Niagara bridge? And why should he scruple to carry such things across a wharf, a river, or an imaginary line, since once inside the custom house frontier no one would object to his carrying them thousands of miles?
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> That unscrupulous men, for their own private advantage, break laws intended for the general good proves nothing; but that no one really feels smuggling to be wrong proves a good deal. Whether we hold the basis of moral ideas to be intuitive or utilitarian, is not the fact

> that protection thus lacks the support of the moral sentiment inconsistent with the idea that tariffs are necessary to the well-being and progress of mankind? If, as is held by some, moral perceptions are implanted in our nature as a means whereby our conduct may be instinctively guided in such way as to conduce to the general well being, how is it, if the Creator has ordained that man should prosper by protective tariffs, that the moral sense takes no cognizance of such a law? If, as others hold, what we call moral perceptions be the result of general experience of what conduces to the common good, how is it that the beneficial effects of protection have not developed moral recognition?
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> To make that a crime by statute which is no crime in morals, is inevitably to destroy respect for law; to resort to oaths to prevent men from doing what they feel injures no one, is to weaken the sanctity of oaths. Corruption, evasion and false swearing are inseparable from tariffs. Can that be good of which these are the fruits? A system which requires such spying and searching, such invoking of the Almighty to witness the contents of every box, bundle and package—a system which always has provoked, and in the nature of man always must provoke, corruption and fraud—can it be necessary to the prosperity and progress of mankind?
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> Consider, moreover, how sharply this theory of protection conflicts with common experience and habits of thought. Who would think of recommending a site for a proposed city or a new colony because it was very difficult to get at? Yet, if the protective theory be true, this would really be an advantage. Who would regard piracy as promotive of civilization? Yet a discriminating pirate, who would confine his seizures to goods which might be produced in the country to which they were being carried, would be as beneficial to that country as a tariff.

The fervent support for taxing land values is no surprise to anyone who knows even a little about Henry George. His support for the classical theory of free trade is no surprise for any student of political economy who understands how deeply George was steeped in the mainstream economics of his day. Some additional elements of his thinking are necessary to round out this portrait of George and free trade. These are his technological optimism and his optimism about the potential for human beings to develop once the bonds of poverty are loosened.

The technological optimism is apparent in the celebration of the advances that George observed during his own lifetime and his expectation that progress would continue into the future, in the absence of gross mismanagement by government. This has a particular relevance for free trade because it undercuts both the national defense argument for protection and the argument for so-called fair trade—the idea that domestic industries need to be protected from low-wage countries by a "scientific" tariff that compensates for the difference in wage rates. George argued that high wages would induce the technological changes that would equalize total costs and therefore permit the survival of domestic firms in the face of international competition.

In the absence of the full implementation of a land value tax, of course, such gains in efficiency would accrue only to "The robber that takes all that is left." Full socialization of rents raises another set of questions. It could mean that government is well supported without any burdensome taxes—a great advantage in efficiency. At this point, in order to benefit the individual (other than by advocating the distribution to all individuals of the rents collected by government) George relies on his great optimism about the potential for improvement of the individual human being under the right environmental conditions. This accounts for the utopian flavor of some of George's writings; for example ([1879] 1956: BK X, Ch V, ¶23):

> But if, while there is yet time, we turn to Justice and obey her, if we trust Liberty and follow her, the dangers that now threaten must disappear, the forces that now menace will turn to agencies of elevation. Think of the powers now wasted; of the infinite fields of knowledge yet to be explored; of the possibilities of which the wondrous inventions of this century give us but a hint. With want destroyed; with greed changed to noble passions; with the fraternity that is born of equality taking the place of the jealousy and fear that now array men against each other; with mental power loosed by conditions that give to the humblest comfort and leisure; and who shall measure the heights to which our civilization may soar? Words fail the thought! It is the Golden Age of which poets have sung and high-raised seers have told in metaphor! It is the glorious vision which has always haunted man with gleams of fitful splendor. It is what he saw whose eyes at Patmos were closed in a trance. It is the culmination of Christianity—the City of God on earth, with its walls of jasper and its gates of pearl! It is the reign of the Prince of Peace!

Jane Jacobs and (Free) Trade

Jane Jacobs, in most cases, supported the conventional version of free trade (not George's expanded version that includes land value taxation), but her focus was somewhat different from that of George. While George minimized the importance of political boundaries, stressing the welfare and freedom of individuals regardless of location, Jacobs focused on cities and their health. This, of course, required attention to city residents, but not to national and other territorial divisions. Jacobs, rather, focused on the trade among cities and between the city and its hinterland: "A city seems always to have implied a group of cities in trade with one another" (Jacobs 1970: 35).

Trade is fundamental to the Jacobs model of urban development. In her view (Jacobs 1970), cities developed before agriculture at locations where natural resources were abundant and were connected by trade routes to other such nodes of activity. As activities agglomerated at the nodes, all sorts of manufacturing and trade-related activities became more efficient through specialization. The distinctive assumption, however, is that agriculture and animal husbandry also originated in and near the city as ways to replace imports of wild food brought as trade goods from remote locations. Whether that surmise is historically correct is irrelevant to the main theme that cities are efficient for many activities because of the density of highly specialized activities, the spread of ideas and products from remote locations via the merchants and traders passing through, the large markets, and the attractiveness to intellectually and economically active people.

Jacobs is no fan of central planning, but does weakly endorse some interference with classical free trade. Because of her focus on trade between cities, which need not be in the same country, she believes that the monetary system (countrywide) may be out of kilter with the requirements of a particular city for trade. If prices are too high for the products that the city "should" export, and it cannot alter the exchange rate because that is determined by the whole country (or other currency area), then the only solution would be tariffs on the appropriate products for the particular city (Jacobs 1985: Ch 11).

The argument is strongest in the case of a potentially large and sophisticated city located in a currency area dominated by agricultural

or raw material exports that offer little possibility of significant spinoffs that expand exports or replace imports. The city may remain a high-cost place to do business for so long that it loses the capacity to "add new kinds of work," to use Jacobs's phrase. Yet this is clearly a peculiar argument for any free trader, and especially for Jacobs. Large cities are always high-cost places relative to rural areas and small towns, but within the span of decades that is involved in the rise and decline of city economies, certainly the relative costs of doing business between the city and the hinterlands could also adjust. The exchange rate is not the only price that changes, and it may not even be the easiest one to change, depending on the international monetary mechanisms of the time and place. Moreover, the tariff-setting process is a political squabble, not a dispassionate exercise in cost accounting, so even if economists knew the "correct" tariff, which they do not, the political process would not yield that. This is an odd lapse for Jacobs who is well aware of the knowledge problem, to which Hayek called attention, that a single mind cannot comprehend all the knowledge to make an economic or ecological system function (Jacobs 2001: 103, 110, 138).

Nevertheless, Jacobs can be considered a free trader. Trade *within* cities is a central theme of Jacobs (1961) and "cities exist because of trade" (Jacobs 1961:340). Where she departs from George (besides the tariff) is in the richer description of the process of induced technological change, as well as the physical design of cities. They share an anti-Malthusian optimism about population, love of cities, and embrace of the technological changes that will be induced by city life, as well as pessimism over the results of attempts at central control of the economy.

Jacobs ([1961] 1992:253–254) did not share George's enthusiasm for taxing land. Would she have, if she had understood it? That is a subtle question. Land value taxation would, of course, exert steady pressure on holders of vacant lots to either develop them or to relinquish control to someone who would. That would contribute to the renewal of cities without requiring the heavy-handed bulldozing of whole neighborhoods that has been so destructive of city life. On the negative side, however, some might argue that the constant pressure to upgrade buildings would eliminate the rundown older ones so rapidly that the city would lack the cheap old buildings that house diverse niche

enterprises, lower income renters, interesting neighborhood retail, and that incubate artistic and other creative enterprises.

"The need for aged buildings" is Chapter 10 of Jacobs (1961), so important was it in her model of the healthy city. It was not just the cheap space, however. More intensive development would, presumably, reduce average lease payments per square foot of building, but would it also eliminate the exceptionally cheap leases for rundown space being held off the market to speculate on future price increases? Another important question for another day is whether land value taxation would put so much pressure on landowners that large swaths of the city would consist of essentially identical buildings designed by formula and resulting in "The self-destruction of diversity" (Jacobs 1961: Ch 13).

Conclusion

Henry George and Jane Jacobs had different goals, neither one specifically economic, both required a view of how the economy functions in order to carry out their analyses. Their views were remarkably similar, even though George could not have known Jacobs and Jacobs (with less excuse) did not know George's works. Neither was smitten by Malthusian pessimism, but both were sufficiently historically aware to recognize that progress is not preordained, that civilizations can decay as well as advance. Moreover, both recognized that progress or decay is not a matter of chance, but rather depends on whether human institutions free individual imagination, intelligence, and effort to pursue a general advance in welfare or channel individual efforts into a dog-eat-dog contest. Both had a dynamic, Austrian view of competition as an effort by entrepreneurs to create new goods and services that would provide benefits to customers that exceeded the costs of production, rather than the static view of neoclassical microeconomics that focuses on identical firms forced to minimize the cost of producing identical commodities. Thus the stress is on creativity and technological change and the most important trade between cities or countries incorporates new ideas and technology, not just the economies of scale that come from specialization, repetition of simple tasks, and use of special purpose machines and equipment.

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